CONSUMER EVALUATION
of
Community Rehabilitation and Treatment Programs
in Vermont: 1997

TECHNICAL REPORT

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Vermont Department of Developmental and Mental Health Services

Consumer Evaluation

of Community Rehabilitation and Treatment Programs in Vermont
Project Overview and Summary of Results

During the fall and winter of 1997, the Vermont Department of Developmental and Mental Health Services asked consumers of services to evaluate Vermont's Community Rehabilitation and Treatment (CRT) programs for people with a severe and persistent mental illness. A total of 1,170 consumers contributed to this evaluation by responding to a mailed questionnaire that asked for their opinion of various aspects of these programs. The respondents include 50% of all people who received Medicaid reimbursed services from these programs during January through June of 1997. The survey instrument was a modified version of the MHSIP Consumer Survey developed by a national multi-stakeholder work group. The Vermont consumer survey was designed to provide information that would help stakeholders to compare the performance of CRT programs in Vermont. These stakeholders, who are the intended audience for this report, include consumers, program administrators, funding agencies, and members of the general public.

Methodology

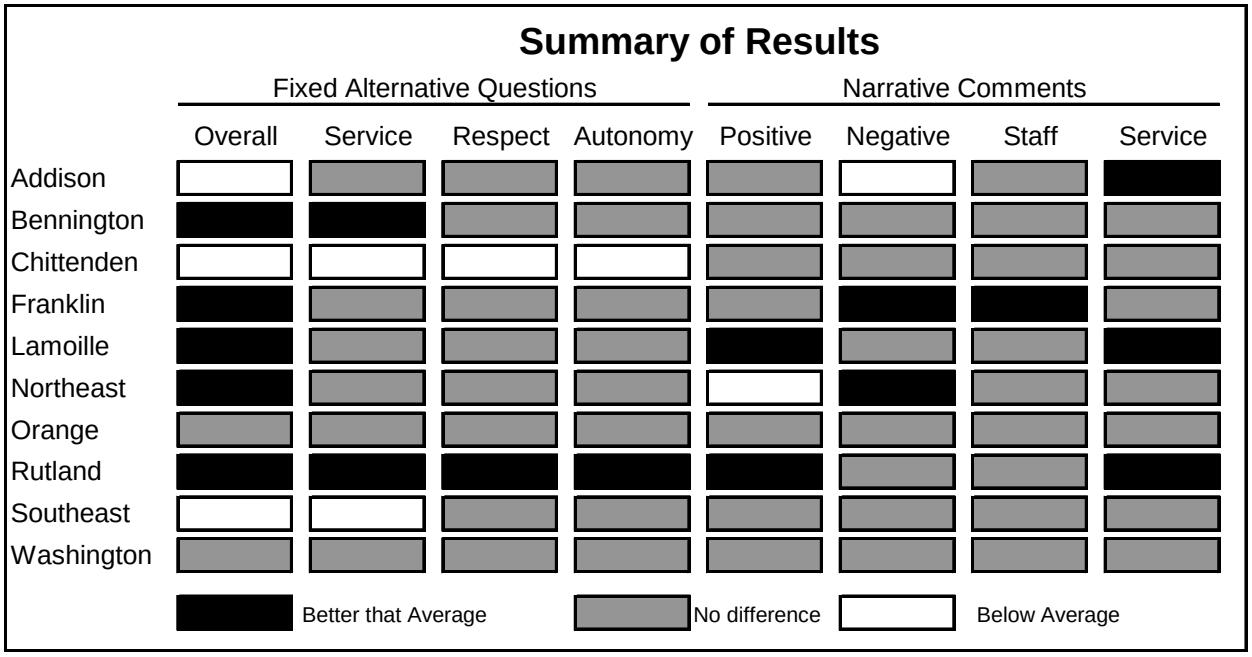
In order to facilitate comparison of Vermont's ten CRT programs, consumers' responses to twenty-one fixed alternative items and four open-ended questions were combined to form eight scales. Four of the scales were based on responses to fixed alternative questions. These scales focus on ***overall*** consumer evaluation of program performance, and evaluation of program performance with regard to ***service***, ***respect***, and ***autonomy***. Four other scales were based on responses to open-ended questions. These scales include frequency of ***positive*** and ***negative*** comments about program performance, and the frequency of positive comments specifically about ***staff*** employed by the programs and ***services*** provided by the programs. In order to provide an unbiased comparison across programs, survey results were statistically adjusted to remove the effect of dissimilarities among the client populations served by different community programs. Measures of statistical significance were also corrected to account for the large proportion of all potential subjects who responded to the survey.

Statewide Results

The majority of consumers of services provided by Community Rehabilitation and Treatment programs in Vermont rated their programs favorably. On our *overall* measure of program performance, 76% of the respondents evaluated the programs positively. Some aspects of program performance, however, were rated more favorably than other aspects. Fixed alternative items related to *services*, for instance, received more favorable responses (77% favorable) than items related to *respect* and *autonomy* (73% favorable*). Positive comments* about program performance were offered by 87% of the consumers, but 56% had *negative comments* about program performance. Consumers offered positive comments about *staff* and *services* in about equal numbers (47% and 46% respectively).

Program Comparisons

In order to compare consumers' evaluations of Vermont's ten Community Rehabilitation and Treatment programs, consumers ratings of individual programs on each of eight composite scales were compared to the statewide average for each scale. The results of this survey indicate that there were significant differences in consumers' evaluations of the state's ten CRT programs.



The Rutland CRT program received the most favorable consumer assessment in the state, scoring better than the statewide average on six of the eight scales. The CRT programs in Franklin and Lamoille Counties scored better than average on three of the eight scales, and Bennington scored better on two scales.

Consumer evaluations of four other programs were mixed or neutral. The CRT programs in Washington and Orange Counties were not different from the statewide average on any of the scales. Northeast was rated better on two scales but below the statewide average on one scale. Addison was rated better on one scale but below the statewide average on two scales.

Consumers rated two programs lower than the statewide average. The CRT program in Chittenden County was scored lower than the statewide average on four of the eight scales. Southeastern Vermont was scored lower than the statewide average on two of the eight scales.

The results of this consumer evaluation of CRT programs in Vermont need to be considered in conjunction with other measures of program performance in order to obtain a balanced picture of the quality of care provided to people with a severe and persistent mental illnesses in Vermont.

To obtain a copy of more complete report of the results and the methodology of this study, contact Pam Mack (802-241-2639). For more information contact John Pandiani, Chief of Research and Statistics, Vermont Department of Developmental and Mental Health Services, 103 South Main Street, Waterbury, Vermont 05671-1601 (802-241-2638) jpandiani@ddmhs.state.vt.us

STATEWIDE RESULTS

The majority of consumers of services provided by Community Rehabilitation and Treatment programs in Vermont rated their programs favorably. (An item by item summary of responses to the fixed alternative questions is provided in Appendix IV)

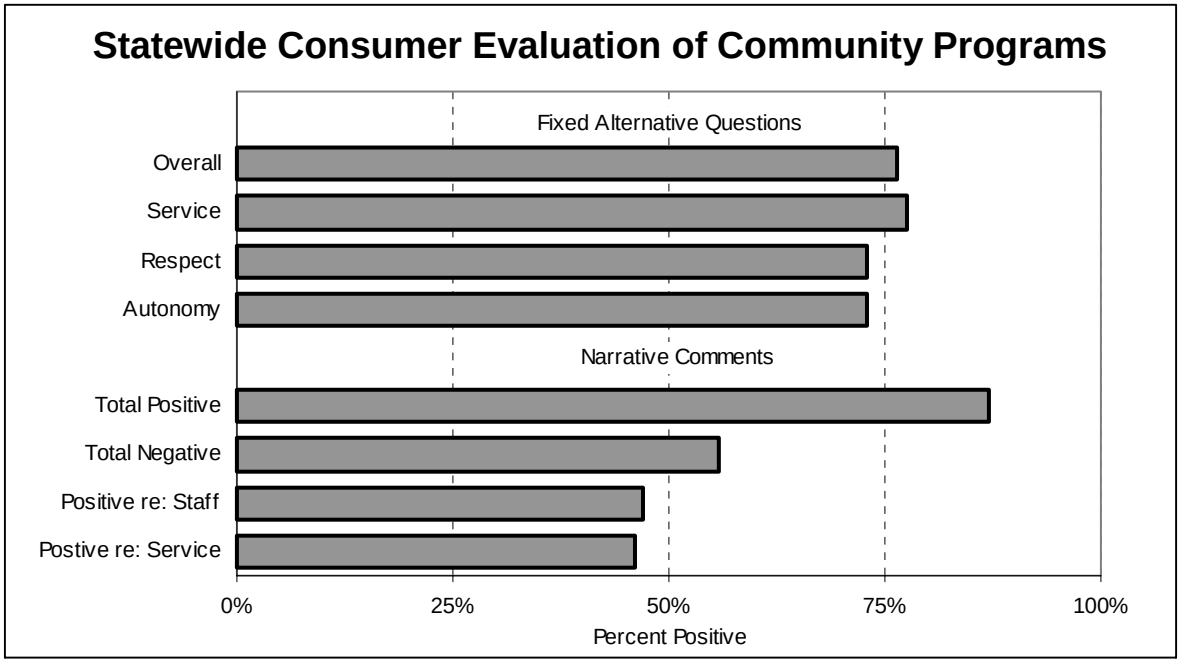
The most favorably rated item was "Staff treat me with respect" (86% positive). Other favorably rated aspects of care included the times at which services were available (83%), the convenience of the location of services, staff competence, staff return of telephone calls, and staff encouragement (82% each).

Eighty-one percent of consumers agreed or strongly agreed that, "Most of the services I receive are helpful."

The least favorably rated item related to consumer participation in the selection of treatment goals. Only 65% of the consumers agreed or strongly agreed that, "I, not staff, decide my treatment goals." Only 68% were satisfied with their "progress in terms of growth, change, and recovery."

The degree to which staff share information with consumers also received relatively low scores. Sixty-nine percent of consumers agreed with the statement, "Staff tell me what side effects to watch out for" and 71% agreed that "Staff help me obtain the information I need to manage my illness."

There were also significant differences in consumer ratings of CRT programs on the eight scales derived from responses to the Vermont consumer survey. More than 76% of consumers rated programs favorably *overall,* the *services* scale received significantly more favorable responses than the *respect* or *autonomy* scales (77% vs. 73% favorable). *Positive comments* about program performance were offered by 87% of the consumers, but 56% had *negative comments* about program performance. Consumers offered positive comments about *staff* and *services* in about equal numbers (47% and 46%).



DIFFERENCES AMONG PROGRAMS

Consumer evaluations of Vermont's ten Community Rehabilitation and Treatment Programs on the eight scales that were built from survey responses varied substantially. In order to provide a comprehensive overall evaluation of program performance, consumer ratings of each program were compared to the statewide average for each of these scales. Combined, these results provide a succinct portrait of consumers' evaluations of each of these community based programs for adults with severe and persistent mental illness.

Rutland Area Community Services was the most favorably rated CRT program in Vermont during 1997. Consumers of CRT services at RACS rated the program better than the statewide average on six of the eight scales (including *Overall*, *Services*, *Respect*, *Autonomy*, *Positive Comments* overall, and *Positive Comments about Services*). RACS was not rated less favorably than average on any scale.

The CRT programs at Lamoille County Mental Health and Franklin Grand Isle were each rated better than the statewide average on three scales. Lamoille was rated higher on the *Overall* scale, and on the frequency of *Positive Comments*, *and Positive Comments about Services*. The CRT program at Franklin Grand Isle Mental was rated better than the statewide average on the *Overall* scale, and *Negative Comments* and *Positive Comments about Staff*. Bennington was higher on two scales; the *Overall* and the *Services* scales.

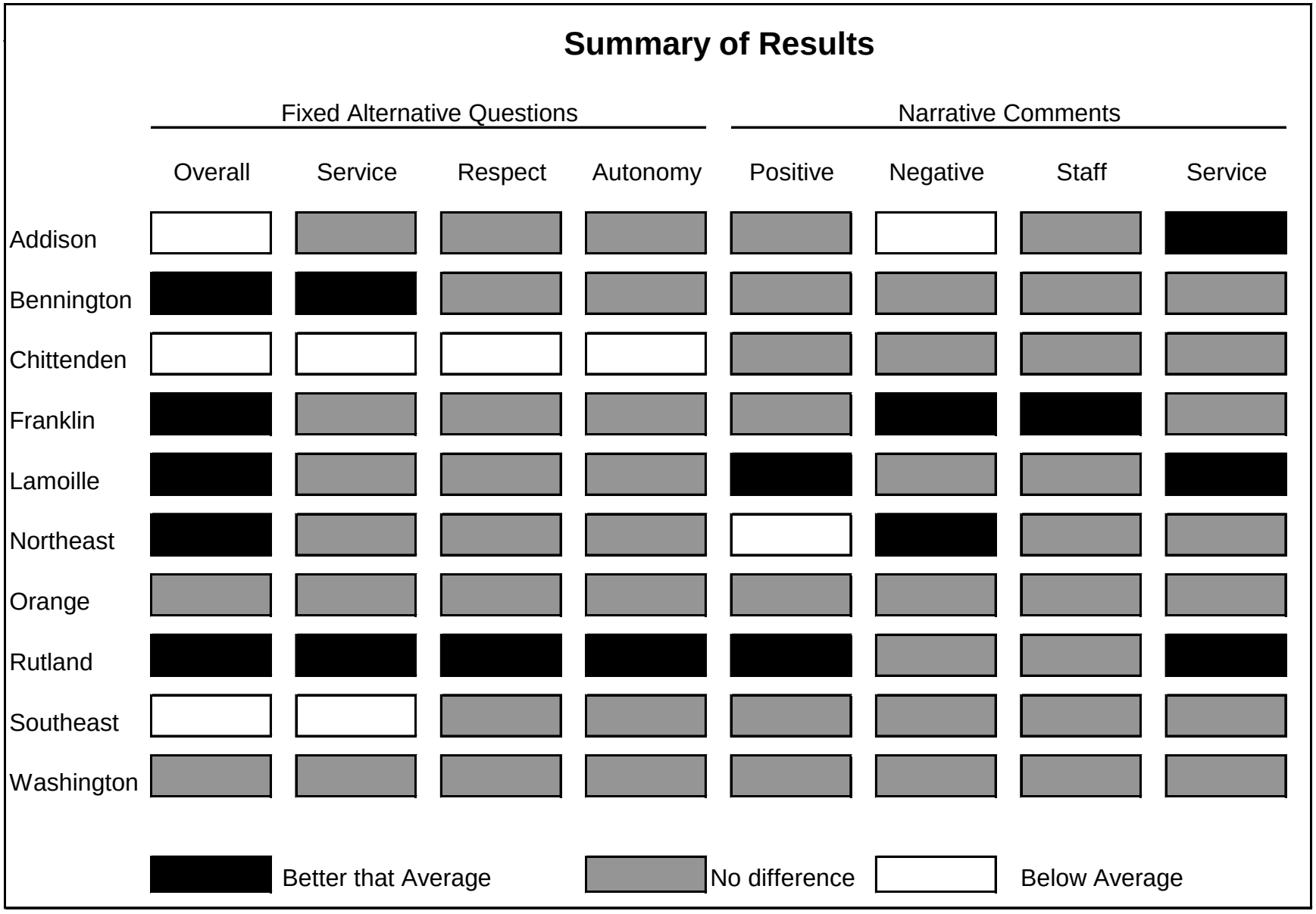
The Northeast Kingdom and Addison County CRT programs received both positive and negative scale scores. Northeast was rated better than the statewide average on the *Overall* scale, and on the frequency of *Negative Comments*, while it was rated less favorably than average on *Positive Comments*. Addison was rated better than the statewide average on *Positive Comments about Services*, while it was rated less favorably than average on the *Overall* scale and the frequency of *Negative Comments*.

The CRT programs at Washington County Mental Health and the Clara Martin Center in Orange County were not different from the statewide average on any of the eight sales.

The Southeast Vermont CRT program was rated below average on two scales (*Overall* and *Services)*.

The CRT program at the Howard Center for Human Services in Chittenden County was the least favorably rated in Vermont during 1997. Consumers of CRT services at HCHS rated the program less favorably than the statewide average on four of the eight scales. These lower than average ratings included the *Overall* consumer evaluation scale, and consumer ratings on the *Services*, *Respect*, and *Autonomy* scales.

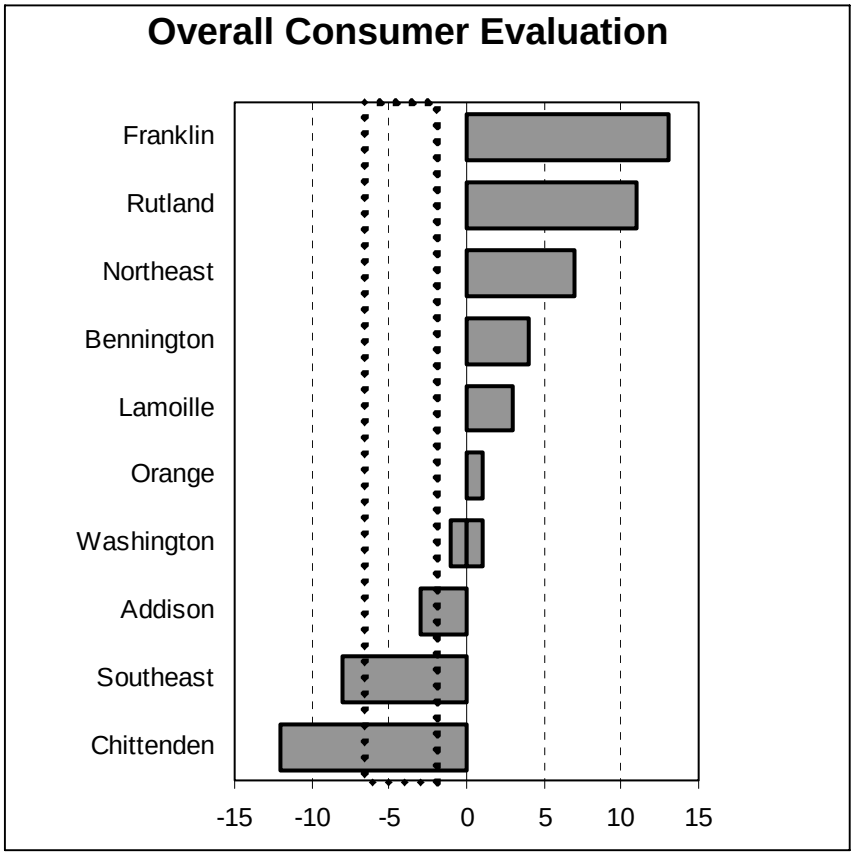
Summary of Results



OVERALL CONSUMER EVALUATION

The measure of overall consumer satisfaction with each of Vermont's ten CRT programs that was used in this study is based on consumer responses to 21 fixed alternative questions. Consumer responses to each question at each program were compared to the statewide average response for the same question. Our composite measure of overall consumer satisfaction was created by counting the number of items on which the program had higher rates of satisfaction that the state as a whole, and the number of items on which the program had lower rates of satisfaction that the state as a whole. (A detailed description of scale construction is provided in Appendix III.)

The results of this comparison indicated whether clients of each program had significantly higher rates of satisfaction that the state as a whole, had significantly lower rates of satisfaction than the state as a whole, or were not different from the state as a whole on each item. Programs with two or more items different from the statewide average were considered to be different from the statewide average.



The CRT programs at Franklin Grand Isle Mental Health and Rutland Area Community Services scored much higher than the other programs on this scale. Franklin was scored higher on 13, and Rutland was scored higher on 11 of the 21 items. Northeast, United Counseling, and Lamoille also received better than average ratings on this scale.

The CRT program at Howard Center for Human Services received lower than average scores on 12 of the 21 items. Southeast and Addison also received lower than average ratings on this scale.

CONSUMER EVALUATION OF "SERVICES"

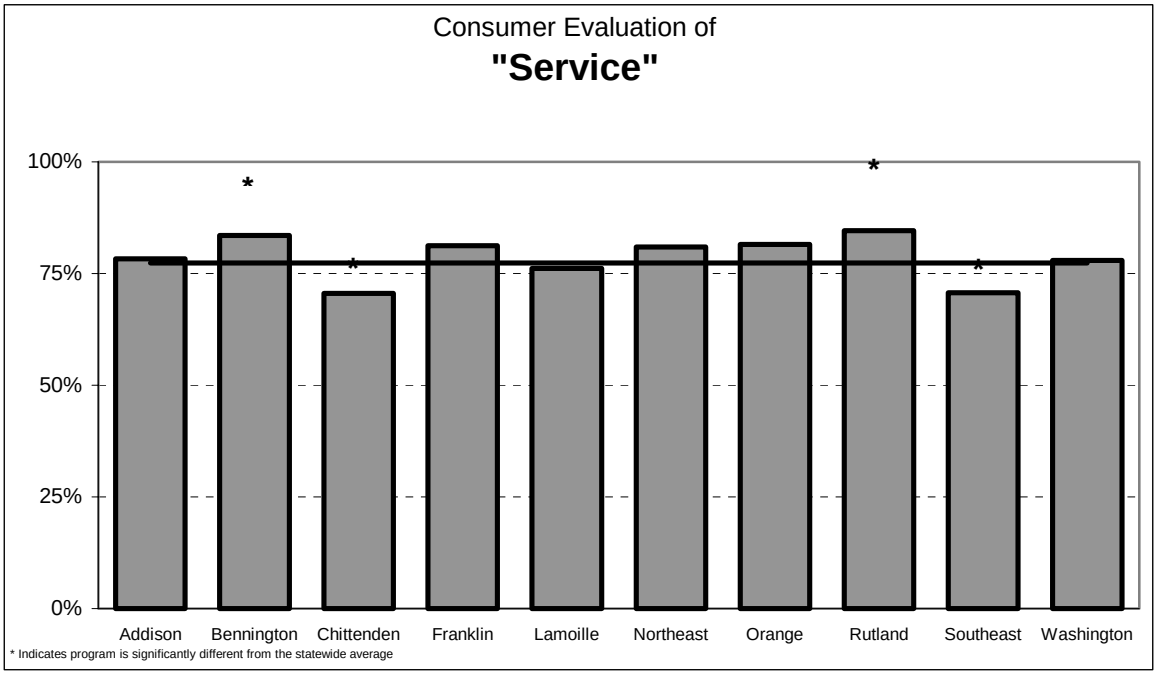
Consumers' ratings of the services they had received, our second composite measure was derived from responses to six fixed alternative questions:

I like the services that I receive here.
I would recommend this agency to a friend or family member.
I am able to get the services I need.
Most of the services I receive are helpful.
Staff I work with are competent and knowledge.
Staff treat me with respect.

Statewide, more than three quarters (77%) of consumers rated their CRT programs favorably on the *Service* scale. Only four CRT programs were rated differently from the statewide average.

Consumers of services provided by the CRT programs in Rutland and Bennington were more likely to give their programs favorable evaluations in this area than the statewide average (85% and 84% respectively).

Consumers of services provided by the CRT programs in Chittenden County and Southeastern Vermont were less likely to give their programs favorable evaluations in this area than the statewide average (71% favorable in each region).



CONSUMER EVALUATION OF "RESPECT' AND "AUTONOMY"

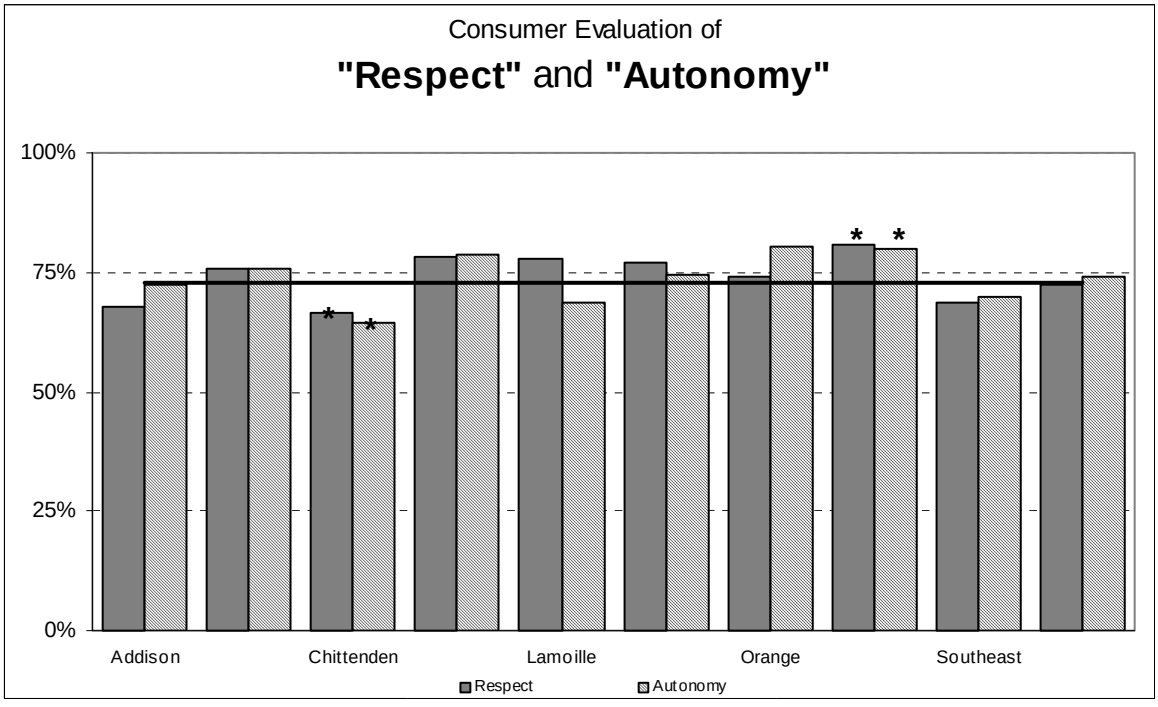
Respect, our third composite measure is based on responses to six questions:

Staff return my calls within 24 hours.
Staff believe I can grow, change, and recover.
My questions about treatment and/or medication are answered to my satisfaction.
I feel free to complain.
I have been given information about my rights.
Staff respect my rights.

Autonomy, our fourth composite measure, is based on responses to five other questions,

Staff Encourage me to take responsibility for my life.
Staff tell me what side effect to watch out for.
Staff respect my wishes about who is and is not,
to be given information about my treatment.
I, not staff, decide my treatment goals.
Staff help me obtain the information I need to manage my illness.

Statewide, almost three quarters (73%) of consumers rated their CRT program favorably on the respect and autonomy scales. Only two CRT programs were rated differently from the statewide average on each of these scales. The CRT program at Rutland Area Community Services was rated more favorably than average on both scales (81% favorable on *Respect* and 80% favorable on *Autonomy*). The Howard Center for Human Services in Chittenden County was rated less favorably than average on both of these scales (66% favorable on *Respect*, and 65% favorable on *Autonomy*.



INDICATORS BASED ON OPEN-ENDED QUESTIONS

In order to obtain a more complete understanding of the opinions and concerns of consumers, four open-ended questions were included in the questionnaire:

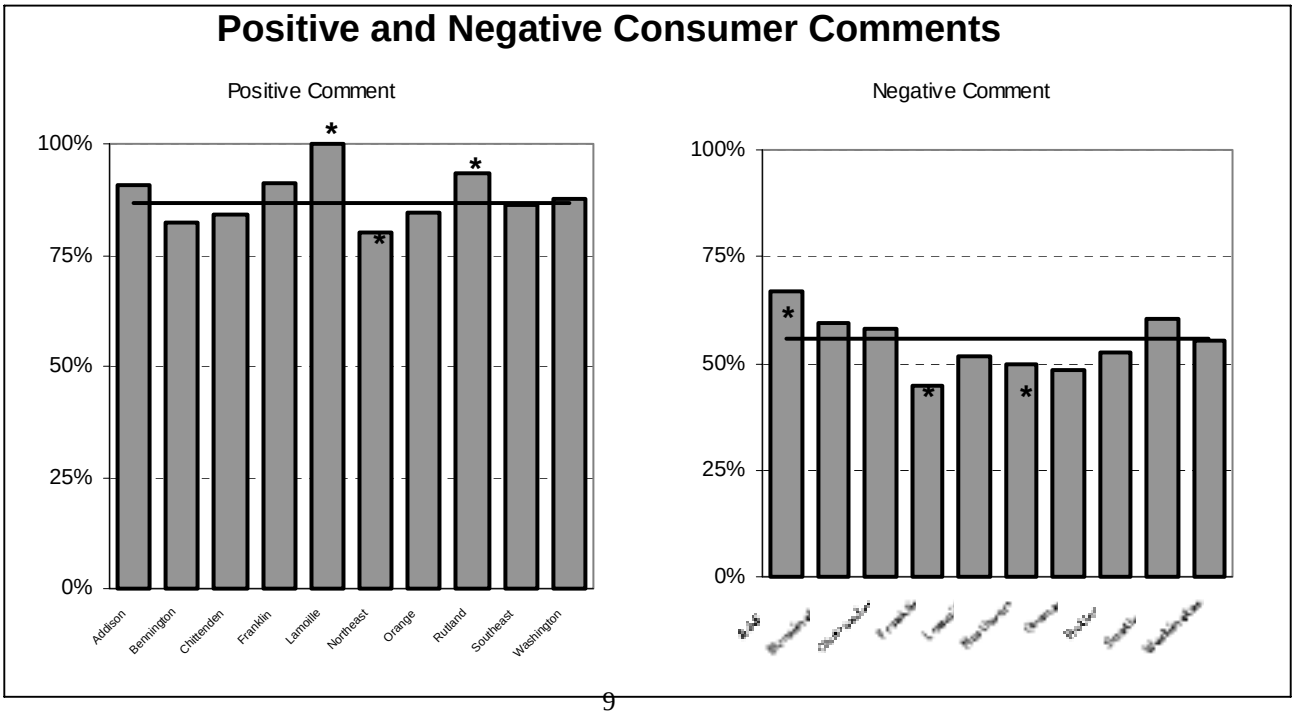
1. What do you like most about the mental health services you have received?
2. What do you dislike about the mental health services you have received?
3. What services that are not now available would you like to have offered?
4. Other comments:

More than 86% of all respondents supplemented their responses to fixed alternative questions with written comments. These comments were coded and grouped to provide four additional indicators of consumer satisfaction with CRT services. The first two indicators are the proportion of all respondents who made *Positive Comments,* and the proportion who made *Negative Comments* about their CRT program. *Positive Comments* were further subdivided in to *Positive Comments about Staff* and *Positive Comments about Services.*

Almost all consumers who responded to the open ended questions (87%) included positive comments and more than half (56%) included negative comments.

CRT consumers from Lamoille and Rutland counties were the most likely to offer *Positive Comments* (100% and 93% of all consumers who provided narrative comments, respectively), while consumers from the Northeast Kingdom were the least likely to offer *Positive Comments* (80% of all who commented).

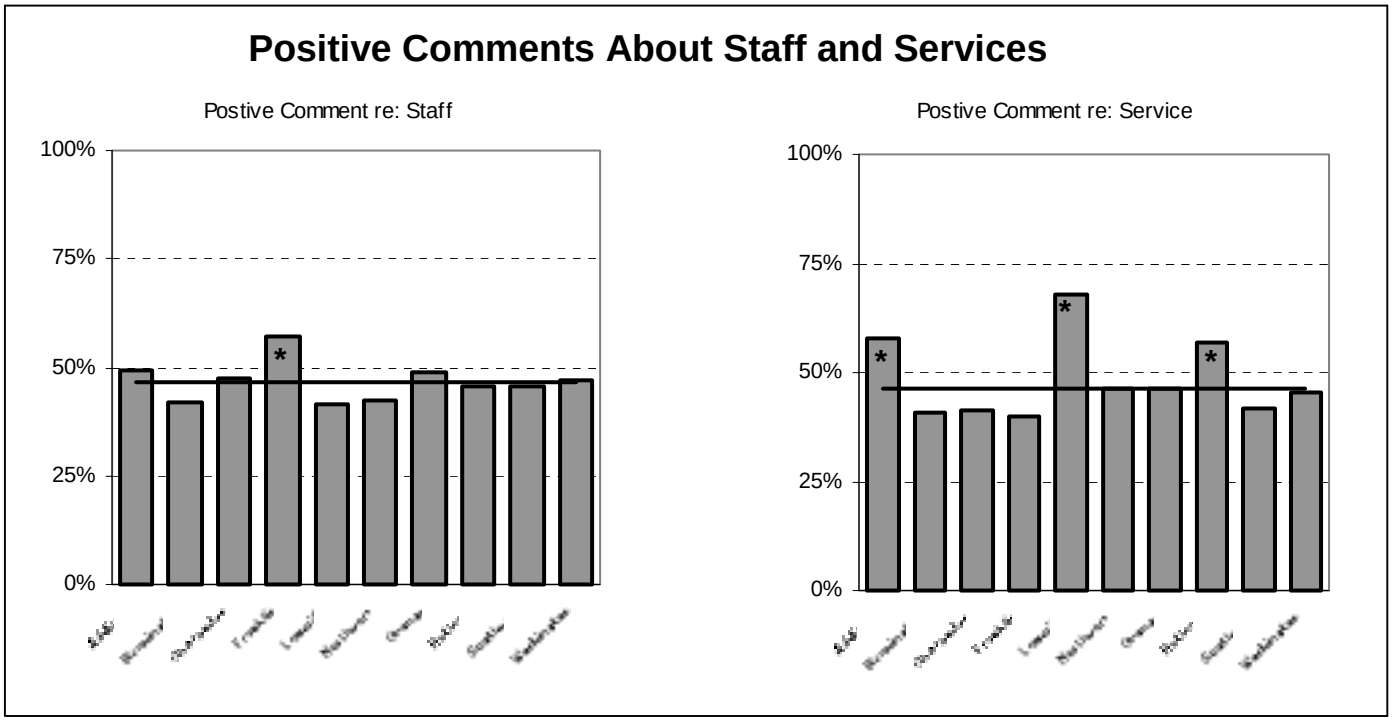
Consumers from Addison County were the most likely to offer *Negative Comments* about some aspect of their CRT program (67%), while consumer from Lamoille County and the Northeast Kingdom were the least likely to have *Negative Comments*, overall (45% and 50% respectively).



Almost half of the consumers who responded to the open ended questions included *Positive Comments about Staff* (47%) and a similar proportion *included Positive Comments about Services* (46%).

Consumers from Franklin and Grand Isle Counties were more likely than other consumers to offer *Positive Comments about Staff* (57%).

Consumers from Lamoille and Orange counties were more likely than other consumers to offer *Positive Comments about Servcies*.



APPENDIX I

FORMS AND LETTERS

Questionnaire

First cover letter

Follow-up Cover Letter

Prior approval letter to program directors

Vermont Mental Health Consumer Satisfaction Survey

Please circle the number that best represents your response to each of the following statements about the mental health services you have received from Counseling Service of Addison County.

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.	I like the services that I receive ….....	1	2	3	4	5
2.	I would recommend this agency to a friend or family member.....	1	2	3	4	5
3.	The location of the services is convenient.....	1	2	3	4	5
4.	Staff are willing to see me as often as I feel it is necessary.....	1	2	3	4	5
5.	I am satisfied with my progress in terms of growth, change, and recovery.....	1	2	3	4	5
6.	Staff return my calls within 24 hours.....	1	2	3	4	5
7.	Services are available at times that are good for me.....	1	2	3	4	5
8.	I am able to get the services I need.....……..	1	2	3	4	5
9.	Staff believe that I can grow, change, and recover.....	1	2	3	4	5
10.	My questions about treatment and/or medication are answered to my satisfaction……	1	2	3	4	5
11.	I feel free to complain.....	1	2	3	4	5
12.	I have been given information about my rights....	1	2	3	4	5
13.	Staff respect my rights.....	1	2	3	4	5
14.	I use and benefit from participation in peer support groups.....	1	2	3	4	5

Vermont Mental Health Consumer Satisfaction Survey
(Cont.)

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
15.	Staff encourage me to take responsibility for how I live my life.....	1	2	3	4	5
16.	Staff tell me what side effects to watch for..….	1	2	3	4	5
17.	Staff respect my wishes about who is, and is not, to be given information about my treatment.....….	1	2	3	4	5
18.	I, not staff, decide my treatment goals..….....	1	2	3	4	5
19.	Staff help me obtain the information I need to manage my illness.....	1	2	3	4	5
20.	Most of the services I receive are helpful.....	1	2	3	4	5
21.	Staff I work with are competent and knowledgeable.....	1	2	3	4	5
22.	Staff treat me with respect.....….	1	2	3	4	5

1. What do you like most about the mental health services you have received?

2. What do you dislike about the mental health services you have received?

3. What services that are not now available would you like to have offered?

4. Other comments:

September 16, 1997

Jane Doe
123 Dirt Road
Small Town, VT 00000

Dear Jane:

You have been selected from among Medicaid recipients to help us evaluate community mental health services in Vermont. Your opinions and your responses are of great value to us. Your participation in this survey is voluntary, and your answers will have no effect on your health care coverage. County Mental Health Services will not know that you are participating in the survey.

Your responses to this survey will not be available to anyone other than our research staff. Results will only be reported in aggregate form, and will not identify specific individuals. The code on the questionnaire will allow us to link your responses to information about your insurance coverage, and to assure that you do not receive another questionnaire after you answer this one.

We hope your response will help improve the quality of health care received by Vermonters. If you would like to receive a summary of the results of this survey, please indicate so on the last page of the questionnaire. If you have any questions, please feel free to call Erin Turbitt at 802-241-2639.

I thank you in advance for your participation.

Sincerely,

Paul R. Blake, Director
Division of Mental Health

/gc
Enclosure

October 8, 1997

Jane Doe
123 Dirt Road
Small Town, VT 00000

Dear Jane:

I am writing to encourage you to complete and return the mental health service evaluation you received about three weeks ago. In case you did not receive the original survey, or misplaced it, I have enclosed another copy for your convenience.

Thank you for your help on this important project.

Sincerely,

Paul R. Blake, Director
Division of Mental Health

/gc
Enclosure

TO: Executive Directors
CRT Directors
Julie Tessler, VCCMHS

FROM: Paul Blake, Director, Division of Mental Health

DATE: July 9, 1997

SUBJECT: Consumer Satisfaction

I am writing to update you on the Division of Mental Health's plans to measure consumer satisfaction with services provided by community mental health centers in Vermont. As you know, the measurement of consumer satisfaction is an important element in our Restructuring Plan.

During this coming fall, the Division will be mailing consumer satisfaction questionnaires to all people who received Medicaid reimbursement services from Community and Rehabilitation Treatment Programs during the first six months of 1997. We will ask that the questionnaires be returned directly to the Department of Developmental and Mental Health Services (DDMHS). Our Research staff will analyze the responses and prepare reports on questionnaire results. Results will be shared with you and other interested parties.

The DDMHS questionnaire (see attached draft version) is based on the consumer satisfaction questionnaire prepared by the national Mental Health Statistics Improvement Program (MHSIP) Task Force on Mental Health Report Care specifically for clients of programs for adults with serious and persistent mental illnesses. This questionnaire is being implemented in a number of states in the Northeast and in other parts of the country.

Our plans for a mail-out satisfaction survey are based on experience in two pilot projects. First, last summer DDMHS conducted a pilot survey of Medicaid behavioral health care recipients in Rutland county in collaboration with Blue Cross/Blue Shield and the Vermont Program for Quality in Healthcare. This effort indicated that mailing questionnaires directly to consumers is a feasible approach for obtaining data on consumer satisfaction with mental health services. Secondly, focus groups conducted with consumers at day programs in Chittenden and Lamoille Counties earlier this spring indicate that questionnaires can provide meaningful data on CRT client satisfaction with mental health services.

It is not our intention that the Division's "global" survey of consumer satisfaction should preclude local providers and program staff from conducting their own satisfaction studies on particular programs such as day or case management services. We encourage you to continue with any plans you may have to measure program specific consumer satisfaction. In fact, this will be an important aspect of CMHC quality improvement programs. We are not, however, requiring that you monitor "global" consumer satisfaction at this time as we feel that our questionnaire will provide a good baseline assessment of overall satisfaction with mental health services provided by designated agencies.

If you feel that receipt of a consumer satisfaction questionnaire by one of your Medicaid CRT clients would cause serious problems, please notify John Pandiani and that client's name will be removed from the questionnaire mailing list. If you have any other questions about the process, please feel free to contact Beth Tanzman (802-241-2604) about policy issues or John Pandiani (802-241-2639) about technical issues.

/gc

Attachment

cc: DDMHS Staff

APPENDIX II

DATA COLLECTION

Project Philosophy

Data Collection Procedures

Program Staff Participation in Data Collection

Consumer Complaints

Project Philosophy

The Vermont consumer survey was designed with two goals in mind. First, the project was designed to provide an assessment of program performance that would allow a variety of stakeholders to compare the performance of CRT programs in Vermont. These stakeholders, who are the intended audience for this report, include consumers, program administrators, funding agencies, and members of the general public. Second, the project was designed to give consumers a voice and to provide a situation in which that voice would be heard. (The implications of these goals for research procedures are discussed in Appendix Two) These two goals led to the selection of research procedures that are notable in three ways.

All qualified individuals, not just a sample of qualified individuals, were invited to participate in the evaluation. This approach was selected in order to assure the statistical power necessary to compare even small programs across the state, and to provide all consumers with a voice in the evaluation of their programs.

Questionnaires were not anonymous (although all responses are treated as personal/confidential information). An obvious code on each questionnaire allowed the research team to link survey responses with other data about respondents (e.g., age, sex, diagnosis, type and amount of service). This information allowed the research team to identify any non-response bias or bias due any to differences in the caseload of different programs, and to apply analytical techniques that control the effect of the bias. The ability to connect survey responses to personally identifying information also allowed Mental Health Division staff to contact respondents whenever strong complaints were received or potentially serious problems were indicated. In such cases respondents were asked if they wanted Department staff to follow up on their complaints.

Sophisticated statistical procedures were used to assure that any apparent differences among programs were not attributable die to differences in caseload characteristics. Statistical adjustments were also used to assure measures of statistical significance were sensitive to the high response rates achieved by this study. Both procedures are described in more detail in Appendix III.

Data Collection

Questionnaires were mailed to every one of the 2,357 individuals who received Medicaid reimbursed services from Community Rehabilitation and Treatment programs in Vermont during January through June, 1997. The questionnaires were mailed during September 1997 through January 1998 by Mental Health Division central office staff. Each questionnaire was clearly numbered. The cover letter to each client specifically referred to this number, explained its purpose, and assured the potential respondent that his or her personal privacy would be protected. The stated purpose of the questionnaire numbers was to allow the research team to identify non-respondents for follow-up, and to allow for the linkage of questionnaire responses to the Medicaid databases. (Only two questionnaires were returned with the identification number removed.)

Before any questionnaires were mailed, a letter was sent to every Community Rehabilitation and Treatment program director. This letter described the project and asked the program directors to identify any clients for who receipt of the questionnaire “could

cause serious problems." (A copy of this letter is provided in Appendix I) Any clients so identified by program directors would have been excluded from the mailing. No clients were identified for exclusion by the program directors.

Approximately three weeks after the original questionnaire was mailed, people who had not responded to the first mailing were sent a follow up. This mailing included a follow up cover letter, a copy of the original cover letter, and a second copy of the questionnaire.

Useable questionnaires were received from 50% of all potential respondents. About 5% of the questionnaires were returned as undeliverable, and another 0.6% were returned indicating that the person had died. The adjusted response rate, excluding undeliverable questionnaires and deceased persons, was 53%, statewide. Adjusted response rates for individual Community Rehabilitation and Treatment programs varied from 38% to 62%. (See Appendix IV for program by program response rates**.)** Older people were more likely to respond than younger people, and people who received more services were more likely to respond than people who received fewer services. There was little difference in the response rates of men and women or the response rates of people in different diagnostic categories.

Forty-five people had been served by two different CRT programs during January through June of 1997. Of these 45 people, 28 (62%) responded at least once. Thirteen people (29%) responded with evaluations of both Community programs from which they had received services. Seventeen people (38%) did not choose to participate in this evaluation of either of the Community Rehabilitation and Treatment Programs from which they had received services.

Consumer Complaints

Written comments accompanied more than 90% of all returned questionnaires. Some of these comments included complaints of various kinds. Whenever a written comment indicated the possibility of a problem that involved the health or safety of a client, or that involved potential ethical or legal problems, a formal complaint procedure was initiated. Staff of the consumer satisfaction project hand-delivered a copy of the questionnaire to the Division of Mental Health staff person responsible for consumer complaints. Each complaint was reviewed by two staff people. If follow-up was deemed appropriate, the consumer was contacted (by phone or mail) to volunteer the service of the Division staff in regard to the complaint. When the consumer agreed, the Division invoked its customary procedures.

In this study, a total of ten questionnaires were referred to the Vermont Division of Mental Health complaint procedure. These questionnaires included a wide variety of specific complaints: assertions of physical and mental abuse, sexual exploitation, forced medication, inadequate health care, inadequate mental health services, dissatisfaction with staff, Medicaid fraud, and others. Complaints were received directly from clients (6 of the ten), from family members (3), and from one guardian. All of the complaints were deemed appropriate for follow-up.

Four of the complainants were reached by telephone and 3 requested follow-up by Department staff. One questionnaire specifically requested follow-up on a complaint with a community mental health center and was referred accordingly. Letters requesting permission to follow-up were sent to the other five complainants. Responses were

received from two of these individuals. Local mental health service providers were contacted with regard to both of these complaints.

Of the six complaints pursued by the Division of Mental Health, five concerned situations of which the local agencies were already aware. Two of the five were well known at the Division as well. One had a relatively short-term resolution that was satisfactory to the client, the outcome of another is unknown, and the remaining four are receiving continuing attention from the local agency involved, the Division of Mental Health, or both.

Program Staff Participation in Data Collection

After the first preliminary results of consumer evaluations of CRT programs were released, a number of questions about the degree of participation of CRT program staff were received by the research team and the mental health division. In order to respond to these inquiries, a brief survey was mailed to the Director of each CRT programs. Results indicate that program staff at most centers helped at least some consumers to complete questionnaires at most programs. The nature of the assistance most often involved reading the questionnaires to consumers or providing assistance with interpretation of the questions. The CRT program directors reported that staff were careful not to influence consumer responses.

The Howard Center for Human Services was the only program to report that staff did not provide assistance with the survey to any CRT clients. Five CRT programs reported helping a few (between 1 and 6) consumers complete the questionnaire. These include the CRT programs at Franklin Grand Isle, Southeastern Vermont, Rutland, Bennington, and Northeast Kingdom. Three CRT programs reported providing assistance to between 10 and 25 consumers. These include the CRT programs at Addison, Lamoille, and Clara Martin. Washington County Mental Health reported that about one-quarter of all CRT clients requested assistance completing the questionnaire.

APPENDIX III:

ANALYTICAL PROCEDURES

Scale construction and characteristics

- Scales Based on Fixed Alternative Questions
- Scales Based on Open-Ended Questions

Data Analysis

- Finite Population Correction
- Case Mix Adjustment
- Discussion

Scale Construction

The Vermont CRT consumer survey included twenty-two fixed-alternative questions and four opened-ended questions. Responses to the fixed alternative questions were entered directly into a computer database for analysis. Responses to the open ended questions were coded into twenty categories. For purposes of analysis, four scales were constructed from responses to the fixed alternative questions, and four scales were constructed from the coded responses to the open ended questions. On the fixed alternative questions, responses that indicated consumers " Strongly Agree" or "Agree" with the item were grouped to indicate a positive evaluation of program performance. Responses to open-ended questions were coded as positive or negative and in terms of the topic of the comment.

Scales Based on Fixed Alternative Questions

Four scales were derived from consumers' responses to the fixed alternative questions. These scales include one that measures consumers' overall evaluation of their CRT programs, a scale that measures consumers' evaluation of the services they receive, a scale that measures consumers' evaluation of program performance in the area of respect, and a scale that measures consumers' evaluation of program performance in the area of autonomy.

Overall consumer evaluation of CRT program performance, our first composite measure, uses 21 of the 22 fixed alternative questions. (Item 14, "I use and benefit from participation in peer support groups," was dropped because it was not possible to disentangle the "use" and the "benefit" dimensions of the question.) For purposes of comparing program performance, the number of positive responses to each question for each program were compared to the statewide average rate of satisfaction for the same question, and the statistical significance of the difference was determined. Our composite measure of overall consumer satisfaction was created by counting the number of items on which each program received more favorable evaluations than the state as a whole and the number of items on which the program had less favorable evaluations than the state as a whole.

Evaluation of Service, our second composite measure was derived from consumer responses to six of the fixed alternative questions. The items were selected on the basis of the results of factor analysis of the entire questionnaire. Items that were correlated with the factor at a level of .60 were included in this item. The Items that contributed to this scale are include:

1. I like the services that I receive here.
2. I would recommend this agency to a friend or family member.
8. I am able to get the services I need.
20. Most of the services I receive are helpful.
21. Staff I work with are competent and knowledge.
22. Staff treat me with respect.

The Service scale was constructed for all individuals who had responded to more than half of these items. The scores for the items that were answered were summed and divided by the number of items answered. The results were rounded to an integer scale, and that scale was dichotemized (Agree and Strongly Agree coded as positive, others as not). The internal consistency of this scale, as measured by average inter-item correlation (Cronbach's Alpha) is .9364.

Autonomy, our third composite measure was derived from consumer responses to five of the other fixed alternative questions. Again, the items were selected on the basis of the results of factor analysis of the entire questionnaire. Items that were correlated with the factor at a level of .60 were included in the autonomy scale. The Items that contributed to this scale include:

15. Staff Encourage me to take responsibility for my life.
16. Staff tell me what side effect to watch out for.
17. Staff respect my wishes about who is and is not, to be given information about my treatment.
18. I, not staff, decide my treatment goals.
19. Staff help me obtain the information I need to manage my illness.

The Autonomy scale, like the Service scale, was constructed for all individuals who had responded to more than half of the items used in the scale. The scores for the items that were answered were summed and divided by the number of items answered. The results were rounded to an integer scale, and that scale was dichotemized as described above. The internal consistency of this scale, as measured by average inter-item correlation (Cronbach's Alpha) is .8479.

Respect, our fourth composite measure was derived from consumer responses to six of the remaining fixed alternative questions. Again, the items were selected on the basis of the results of factor analysis of the entire questionnaire. Items that were correlated with the factor at a level of .60 were included in this item. The Items that contributed to this scale include:

6. Staff return my calls within 24 hours.
9. Staff believe I can grow, change, and recover.
10. My questions about treatment and/or medication are answered to my satisfaction.
11. I feel free to complain.
12. I have been given information about my rights.
13. Staff respect my rights.

The Respect scale, like the Autonomy and Service scales, was constructed for all individuals who had responded to more than half of the items in the scale. The scores for the items that were answered were summed and divided by the number of items answered. The results were rounded to an integer scale, and that scale was dichotomized as described above. The internal consistency of this scale, as measured by average inter-item correlation (Cronbach's Alpha) is .8275.

Scales Based on Open-Ended Questions

In order to obtain a more complete understanding of the opinions and concerns of consumers of CRT services in Vermont, four open-ended questions were included in the questionnaire:

1. What do you like most about the mental health services you have received?
2. What do you dislike about the mental health services you have received?
3. What services that are not now available would you like to have offered?
4. Other comments:

Eighty six percent of the 1,009 respondents supplemented their responses to fixed alternative questions with written comments. These written responses were coded and grouped to provide four additional indicators of consumer satisfaction with Community Rehabilitation and Treatment services.

The first indicator derived from consumer responses to the open ended questions was the proportion of all respondents who made positive comments about their CRT program, and the second indicator was the proportion of all respondents who made negative comments about their CRT programs. In order to provide more specificity, positive comments were further subdivided into positive comments about staff and positive comments about services.

Data Analysis

In order to provide a more valid basis for comparison of the performance of Vermont's ten CRT programs, two statistical correction/adjustment procedures were incorporated into the data analysis. First, a "finite population correction" was applied to results to adjust for the high proportion of all potential respondents who returned useable questionnaires. Second, a statistical "case mix adjustment" helped to eliminate any bias that might be introduced by dissimilarities among the client populations served by different community programs.

Finite Population Correction

Consumer satisfaction surveys, intended to provide information on a finite number of people who are served by community mental health programs, can achieve high response rates. More than half of all potential respondents to this survey, for instance, returned useable questionnaires. When responses are received from a large proportion of all potential subjects, standard techniques for determining confidence intervals overstate the uncertainty of the results. The standard procedure for deriving 95% confidence intervals for survey results assumes an infinite population represented by a small number of observations. This confidence interval is derived by multiplying the standard error of the mean for the sample by 1.96.

In order to correct this confidence interval for studies in which a large proportion of all potential respondents is represented, a "finite population correction" can be added to the computation. The corrected confidence interval is derived by multiplying the

uncorrected confidence interval by $\sqrt{1 - n/N}$, where n is the number of observations and N is the total population under examination.

The statistical significance of all findings in the body of this report have been computed using this finite population correction.

Case-mix Adjustment

In order to compare the performance of Vermont's ten Community Rehabilitation and Treatment programs, each of the eight measures of consumer satisfaction described above were statistically adjusted to account for differences in the case-mix of the ten programs. This process involved three steps. First, client characteristics that were statistically related to variation in consumer evaluation of CRT programs were identified. The client characteristics that were tested include age, gender, volume of service received, and diagnosis (schizophrenia and depression). Second, statistically significant differences in the caseloads of the community programs were identified and compared to the variables that were related to variation in consumer ratings of program performance. Finally, variables that were statistically related to both response rates and satisfaction with services were used to adjust the raw measures of satisfaction for each community program. The relationship of each of our eight scales to client characteristics and the variation of each across programs is described in the following table:

Statistical Significance of Relationships

	Potential Risk Adjustment Factors				
	Age	Gender	Volume of Service	Affective Disorder	Schizophrenia
Case Mix	0.182	**0.057**	**0.000**	0.741	**0.000**
Fixed Alternative					
Overall	**0.000**	0.399	0.166	0.287	**0.027**
Service	**0.000**	0.254	0.101	0.545	**0.016**
Respect	**0.000**	0.197	0.339	0.408	0.210
Autonomy	**0.007**	0.341	0.808	0.331	0.408
Narrative Comments					
Postive	**0.007**	0.116	**0.047**	0.515	0.105
Negative	**0.000**	0.571	0.371	0.605	**0.036**
Staff	0.172	**0.000**	0.415	0.683	0.832
Service	**0.033**	0.596	0.468	0.878	0.802

Three of the five potential risk adjustment factors were found to vary among CRT programs at a statistically significant level (p<.10). These factors include consumer gender, the volume of service received during January through June,1997, and the proportion of consumers who had a diagnosis of schizophrenia. Programs did not differ in the age distribution of the consumers they served or in the proportion of consumers who had a diagnosis of affective disorder.

None of the scales based on the fixed alternative questions were related to consumer gender or to the volume of service received, so none of these scales needed risk adjustment for variation in gender or to the volume of service. The *service* scale, however, was significantly related to having a diagnosis of schizophrenia. People with a diagnosis of schizophrenia rated their CRT programs less favorably on the scale. Because scores on this scale were related to a diagnosis of schizophrenia and the prevalence of the diagnosis of schizophrenia varied among the programs, this scale was risk adjusted before scales for different programs were compared. The *overall* scale was constructed from individual items after the individual items were risk adjusted (14 items required risk adjustment).

Three of the scales derived from consumers' narrative comments were related to risk factors that varied among programs. The frequency of *Positive Comments* was related the volume of service received (people who received more service were more likely to offer *Positive Comments* about services). The frequency of *Negative Comments* was related the diagnosis of schizophrenia (people with a diagnosis of schizophrenia were less likely to *offer Negative Comments* about services). Finally, the frequency of *Positive Comments about Staff* was related to the gender of the consumer (women were more likely to offer *Positive Comments about Staff*). The scores for these three scales were also adjusted before scores for different programs were compared.

Whenever a statistical adjustment of survey results was necessary to provide an unbiased comparison of CRT programs, the analysis followed a four-step process. First, the respondents from each community program were divided into the number of categories resulting from the combination of risk factors. When a gender adjustment alone is required, two categories are used. When gender (two categories) and age (three categories) adjustments are both indicated, six categories result. Second, the average (mean) consumer rating was determined for each of these categories. Third, the proportion of all CRT clients, statewide, who fell into each category was determined. Finally, the average consumer rating for each category was multiplied by the statewide proportion of all potential respondents who fell into that category, and the results were summed to provide a measure of consumer rating that is free of the influence of differences in the characteristics of consumers across programs.

Mathematically, this analytical process is expressed by the following formula:

$$\sum w_i \overline{X_i}$$

Where "w_i " is the proportion of all potential respondents who fall into category "I", and "$\overline{X_i}$" is the average level of satisfaction for people in age group "I".

When one of the categories used in this analysis includes no responses, it is necessary to reconsider if the difference between the caseload of a specific program and the caseload of other programs in the state is too great to allow for statistical case mix adjustment. If it is decided that the difference is within reason, the empty category should be collapsed into an

adjacent category and the process described above should be repeated using the smaller set of categories.

Discussion

Both of the statistical adjustments/corrections used in this evaluation allowed the analysis to take into account the methodological strengths and shortcomings of the survey and the unique characteristics of Vermont's community mental health programs. Finite population correction provides the narrower confidence intervals that are appropriate to a study, which obtains responses from a large proportion of all potential respondents. Statistical adjustment for difference in case-mix allows researchers and program evaluators to appropriately compare the performance of programs that serve people with different demographic and clinical characteristics, and different patterns of service utilization.

In Vermont, the finite population correction had a substantial impact on the statistical significance of the results of the consumer satisfaction survey. The statistical adjustment designed to correct for differences in case mix across provider organizations had little impact on the survey results. This pattern is the result of specific characteristics of the Vermont survey and the Vermont system of care. The Vermont survey had a very high response rate, and there was very little difference in the client populations of the ten programs in areas that were related to consumer satisfaction. The relative impact of these statistical adjustments will be very different in situations where response rates are lower and/or case mix differences are more substantial.

APPENDIX IV

TABLES

Response rates

Question by question Ratings of Programs

Scale Scores

Table 1

Response Rates

Consumer Evaluation

of Community Rehabilitation and Treatment Programs in Vermont, 1997

		Number				Response Rate	
	Total Mailed	Returned	Undeliverable	Deceased	No Response	% of all Mailed	% of Deliverable
Total	2,357	1,170	124	13	1,050	50%	53%
Addison	105	59	3	1	42	56%	58%
Bennington	137	74	5	0	58	54%	56%
Chittenden	465	196	41	6	222	42%	47%
Franklin	145	82	9	1	53	57%	61%
Lamoille	103	38	2	1	62	37%	38%
Northeast	267	161	9	0	97	60%	62%
Orange	89	46	2	0	41	52%	53%
Rutland	234	124	12	2	96	53%	56%
Southeast	349	179	19	1	150	51%	54%
Washington	463	211	22	1	229	46%	48%

Table 2

Positive Evaluation Rate for Each Item

STATE	Addison	Bennington	Chittenden	Franklin	Lamoille	Northeast	Orange	Rutland	Southeast	Washington
Staff treat me with respect.										
86%	85%	88%	84%	**91%**	82%	89%	87%	**93%**	82%	84%
Services are available at times that are good for me.										
83%	81%	85%	**77%**	**90%**	**95%**	**87%**	84%	**90%**	83%	79%
Staff I work with are competent and knowledgeable.										
82%	83%	80%	78%	**94%**	79%	84%	84%	**88%**	**78%**	81%
The location of the services is convenient.										
82%	84%	81%	**77%**	**89%**	**98%**	**88%**	80%	85%	81%	79%
Staff return my calls within 24 hours.										
82%	84%	81%	77%	**89%**	**98%**	**88%**	80%	85%	81%	79%
Staff encourage me to take responsibility for how I live my life.										
82%	76%	87%	80%	83%	83%	**78%**	86%	86%	82%	82%
Most of the services I receive are helpful.										
81%	84%	84%	**76%**	**88%**	72%	83%	84%	**86%**	**74%**	81%
Staff respect my wishes about who is, and is not, to be given information about my treatment.										
80%	76%	84%	**70%**	83%	74%	**86%**	80%	**88%**	78%	82%
Staff respect my rights.										
78%	72%	**85%**	**71%**	79%	76%	80%	82%	**85%**	74%	81%
I like the services that I receive.										
78%	74%	**86%**	**72%**	**85%**	66%	80%	72%	78%	**72%**	78%
I am able to get the services I need.										
76%	75%	79%	**71%**	**83%**	84%	79%	78%	76%	72%	77%
Staff are willing to see me as often as I feel it is necessary.										
76%	**67%**	77%	**69%**	**88%**	82%	80%	76%	**82%**	**71%**	75%
I feel free to complain.										
74%	76%	72%	73%	**83%**	78%	77%	78%	76%	**67%**	76%
I have been given information about my rights.										
74%	72%	80%	72%	78%	81%	75%	82%	**87%**	**66%**	71%
I would recommend this agency to a friend or family member.										
74%	70%	79%	**68%**	78%	60%	**79%**	67%	79%	71%	71%
My questions about treatment and/or medication are answered to my satisfaction.										
74%	73%	**82%**	69%	**83%**	69%	76%	79%	**83%**	**67%**	74%
Staff believe that I can grow, change, and recover.										
73%	67%	**84%**	**64%**	74%	62%	71%	79%	**79%**	72%	**78%**
Staff help me obtain the information I need to manage my illness.										
71%	**62%**	76%	69%	74%	65%	75%	67%	76%	72%	**65%**
Staff tell me what side effects to watch for.										
69%	**59%**	74%	**60%**	**77%**	74%	68%	**81%**	**81%**	**64%**	69%
I am satisfied with my progress in terms of growth, change, and recovery.										
68%	69%	69%	**62%**	70%	73%	69%	75%	70%	66%	69%
I, not staff, decide my treatment goals.										
65%	65%	61%	63%	**75%**	76%	**71%**	66%	65%	65%	62%
Number of items different from state average										
	3 (-)	4 (+)	12 (-)	13 (+)	3 (+)	7 (+)	1 (+)	11 (+)	8 (-)	1 (-) 1 (+)

Scores that are signfically different than the statewide average are in bold.
Score includes people who indicated they "agree" or "strongly agree" on each item.

Table 3

Scale Scores

Consumer Evaluation

of Community Rehabilitation and Treatment Programs in Vermont, 1997

	Fixed Alternative Questions				Narrative Comments			
	Overall	Service	Respect	Autonomy	Positive	Negative	Staff	Service
Statewide	80%	77%	73%	73%	87%	56%	47%	46%
Addison	**80%**	78%	68%	72%	91%	**67%**	49%	**58%**
Bennington	**86%**	**84%**	76%	76%	82%	59%	42%	41%
Chittenden	**73%**	**71%**	**66%**	**65%**	84%	58%	47%	41%
Franklin	**86%**	81%	78%	79%	91%	**45%**	**57%**	40%
Lamoille	**81%**	76%	78%	68%	**100%**	52%	41%	**68%**
Northeast	**83%**	81%	77%	74%	**80%**	**50%**	42%	46%
Orange	84%	81%	74%	80%	85%	48%	49%	46%
Rutland	**87%**	**85%**	**81%**	**80%**	**93%**	52%	46%	**57%**
Southeast	**76%**	**71%**	69%	70%	86%	60%	46%	42%
Washington	80%	78%	72%	74%	88%	55%	47%	45%

Overall is the count of items on which the program rating was different from the statewide average. Scales on other scales from fixed alternative questions are the proportion of people who indicated they "agree" or "stronly agree". Scales from narrative comments include people who provided comments to the open-ended questions. Scores that are signfically different than the statewide average are in bold.